



Winter 2004

Inside:

Trends	3
Prevention	4
Diet and Exercise	5
Risk Factors	6
General Health Status	7

Idaho Diabetes Prevention and Control Program



IDAHO DEPARTMENT OF
HEALTH & WELFARE

Overweight, Obesity and Diabetes in Idaho

Weight management is a primary concern of medicine today, driven by the pandemic of overweight and obesity, and the morbidity associated with those conditions. As this report documents, 57% of Idaho adults are overweight. More than 6% of Idaho adults have been diagnosed with diabetes. Overweight individuals, with and without diabetes, suffer more health problems than those who are normal weight.

The Diabetes Prevention Program (DPP) demonstrated significant reduction in risk for diabetes in individuals who walked half an hour a day and lost as little as 5-7% of baseline weight (New England Journal of Medicine, Feb. 7, 2002). Research also has clearly shown that diet and exercise help people with type 2 diabetes control their blood glucose, blood pressure and blood lipids in the short term. The Look AHEAD study, recently launched by National Institute of Diabetes & Digestive & Kidney Diseases, is investigating whether this risk factor improvement can translate into a reduction of the risk for diabetes complications (www.lookAHEADstudy.org).

Meanwhile, physicians and health care providers know that they should be addressing weight management. Obese patients who receive weight management counseling are significantly more likely to undertake weight loss programs than those who do not (Obesity Research, Sept. 2001). However, a 2003 American Diabetes Association survey found that only 26% of people who tried to lose weight said their physician played a role in their effort (ADA Publication 2003-09-09).

The Idaho Diabetes Prevention and Control Program (DPCP), the American Diabetes Association (ADA), and the National Diabetes Education Program (NDEP) are therefore launching programs to provide support to health care providers and their overweight patients. This publication offers information and resources to physicians and other health care providers addressing the challenges of overweight and obese patients with and without diabetes in Idaho.

Methods and Definitions

Body Mass Index (BMI):

Overweight is defined as having a Body Mass Index (BMI) of greater than 25, while obese is defined as having a BMI greater than 30. BMI is calculated by dividing a person's weight in kilograms by the square of their height in meters. See Chart.

Waist/Hip Ratio:

Waist-to-hip ratio (WHR) looks at the proportion of fat stored on the body around the waist and hip. Extra weight around the stomach increases the risk of heart disease and diabetes.

Waist/Hip Ratio is calculated by dividing the waist measurement by the hip measurement. Ideally, women should have a waist-to-hip ratio of 0.8 or less. Men should have a waist-to-hip ratio of 0.95 or less.

The Behavioral Risk Factor Surveillance System (BRFSS) is a cross-sectional telephone survey conducted by the Centers for Disease Control and Prevention and state health departments. The BRFSS questionnaire consists primarily of questions about personal behaviors that increase risk for one or more of the 10 leading causes of death in the United States. Diabetes is the sixth leading cause of death.

Idaho used disproportionate stratified sampling for its 2002 BRFSS. The samples were stratified by Idaho's seven public health districts. Approximately 700 Idahoans were interviewed in each health district each year, resulting in a total sample size of 4,857. The samples were disproportionately stratified within the health districts by telephone blocks. The interviewers used computer-assisted telephone interviewing (CATI) software to record responses. The data were weighted to account for differences in the probability of selection. Post-stratification weighting, based on 2002 population estimates, was used to more closely represent population characteristics and to develop estimates of the numbers of people with various risk factors. Idaho used SAS software for data manipulation.

Body Mass Index (BMI)

Risk of Associated Disease According to BMI and Waist Size			
BMI		Waist less than or equal to 40 in. (men) or 35 in. (women)	Waist greater than 40 in. (men) or 35 in. (women)
18.5 or less	Underweight	--	N/A
18.5 - 24.9	Normal	--	N/A
25.0 - 29.9	Overweight	Increased	High
30.0 - 34.9	Obese	High	Very High
35.0 - 39.9	Obese	Very High	Very High
40 or greater	Extremely Obese	Extremely High	Extremely High

Overweight, Obesity and Diabetes Rising in Idaho

Along with the rest of the nation, Idaho adults are increasingly overweight and obese. The incidence of diabetes has risen along with the rise in obesity, as indicated by the 2002 Idaho BRFSS data. Almost 3 of 5 Idahoans were overweight in 2002. Thirty-seven percent of respondents were overweight but not obese. The percentage reporting obesity rose from 15% to 20% from 1994-2002. The rate of diabetes rose from 3.6% to 6.1%. Idaho's data is consistent with international research, documenting a close link between overweight, obesity and diabetes.

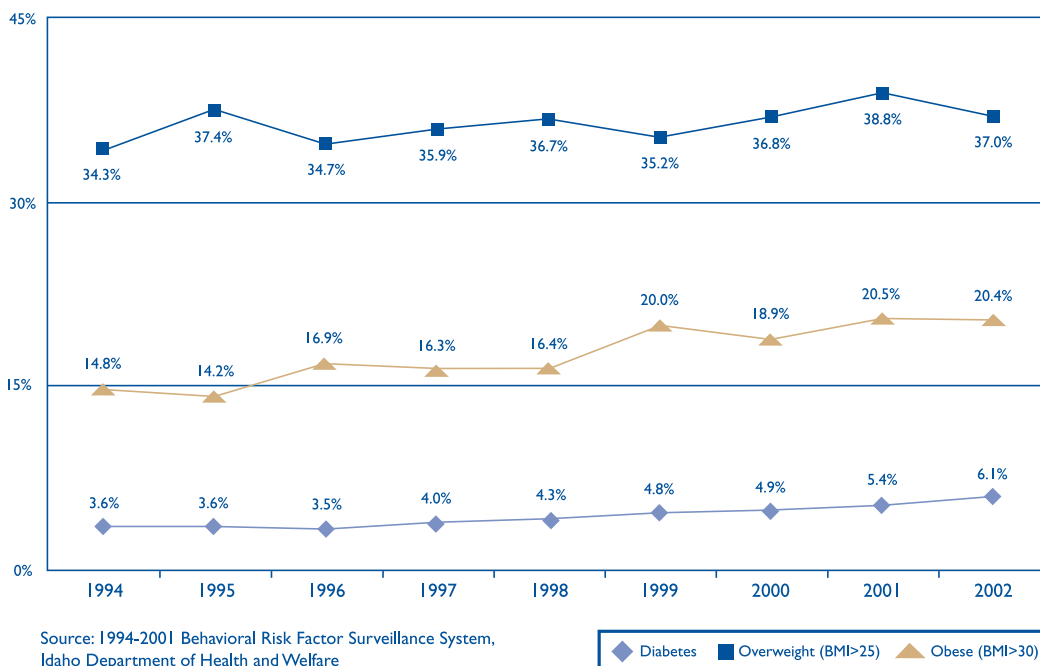
Although this trend has been widely reported in the media, Americans aren't yet willing to take the risk personally. According to a 2003 survey from the American Diabetes Association (ADA), most overweight and obese Americans don't believe they are at serious risk for type 2

diabetes. Although more than half of respondents knew that being overweight is a leading risk factor, the survey found that an alarming 59% nevertheless maintained they were not at personal risk for the disease (ADA Publication 2003-09-09).

Most overweight and obese Americans don't believe they are at serious risk for diabetes.

- 2003 American Diabetes Association Survey

Trends in Diabetes, Overweight* and Obesity* Among Idaho Adults, 1994-2002 BRFSS



Overweight is being defined as having a BMI of 25 to 29.9, while obese is defined as having a BMI equal to or greater than 30.

Weight and Diabetes Increase with Age, But Preventive Measures Are Effective

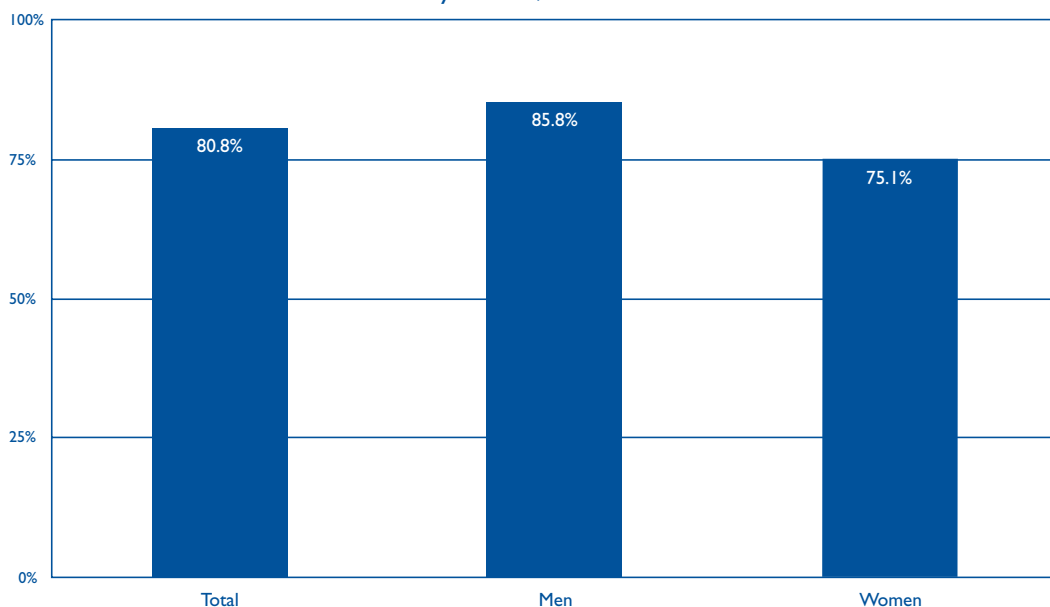
“Lifestyle intervention worked equally well in men and women and in all the ethnic groups. It was most effective in people age 60 and older, who lowered the risk of developing diabetes by 71%.”

- DPP Study Chair Dr. David Nathan,
Massachusetts General Hospital

The Idaho 2002 BRFSS data confirmed that weight and diabetes increase with age. Substantial increases begin appearing after the age of 35. The numbers then double in the 55-to-64 age group. They jump again in people ages 65 and older. Among Idaho adults with diabetes, 81% are overweight. Men with diabetes have a higher prevalence (86%) than women (75%) of being overweight.

The good news is that lifestyle intervention has been demonstrated effective at preventing diabetes for both men and women of all ages and from all ethnic groups. The DPP Program (reported in the New England Journal of Medicine, Feb. 7, 2002) compared three approaches -lifestyle modification, treatment with metformin, and standard medical advice-in 3,234 overweight people with impaired glucose tolerance (IGT), a pre-diabetic condition in which blood glucose levels are higher than normal but not yet diabetic. Lifestyle change was the most effective approach. Moderate diet and exercise programs reduced diabetes incidence by 58% in at-risk adults.

Idaho Adults with Diabetes Who Were Overweight (BMI≥25)
by Gender, 2002 BRFSS



Source: 2002 Behavioral Risk Factor Surveillance System,
Idaho Department of Health and Welfare

Older study participants (60+) lowered their risk of developing diabetes by 71%.

“Not only did changes in diet and physical activity prevent or delay the development of diabetes; they actually restored normal glucose levels in many people,” said Dr. Allen Spiegel, director of the National Institute of Diabetes and Digestive and Kidney Diseases (NIDDK).

Diet and Physical Activity Key to Weight and Diabetes Control

Fruits and Vegetables

Diabetes educators and weight loss counselors emphasize fruits and vegetables because people who eat the recommended servings benefit from the vitamins, minerals and fiber and are less likely to eat foods high in fat, sugar, sodium and refined carbohydrates. Idahoans apparently haven't learned that lesson from mom or the food pyramid. More than half of Idahoans aren't eating the recommended five servings a day of fruits and vegetables. As health care providers set dietary goals with patients for weight loss, they will find it helpful to emphasize fruits and vegetables along with reducing calories and fat.

Health professionals must continue to stress the importance of a balanced diet and physical activity for healthy weight loss.

- Journal of the American Medical Association, January 1, 2003

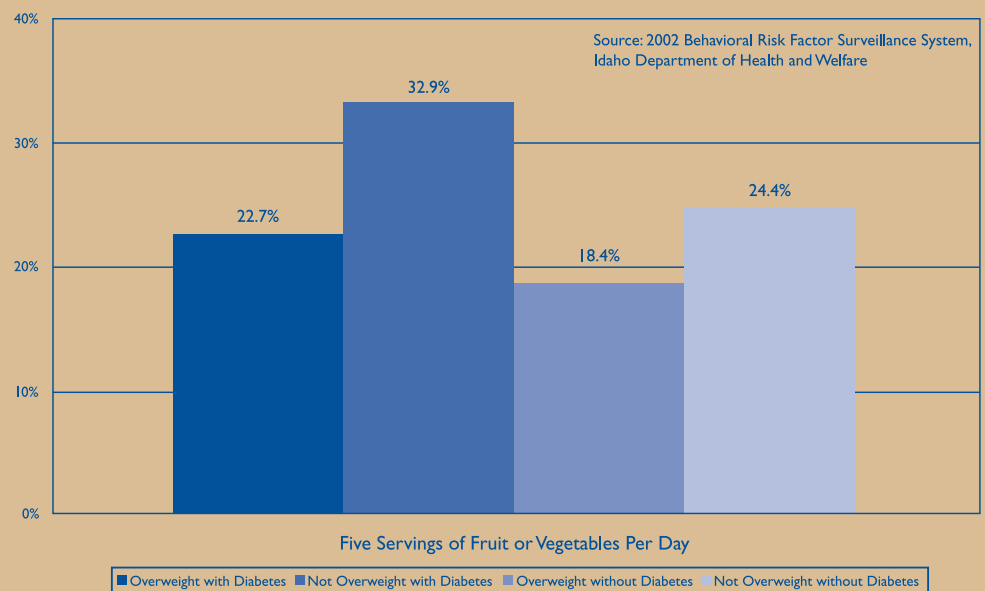
Exercise

A sedentary lifestyle is associated with weight gain and diabetes, but the DPP study demonstrated that people don't have to run marathons to improve their health. Thirty minutes of moderate exercise five days a week can significantly improve health. Walking was the exercise of choice for most of the DPP study participants.

Dancing, swimming, biking, and jogging are also excellent choices.

To encourage their patients to walk, health care professionals may want to suggest a pedometer as an inexpensive tool to monitor progress. Encourage patients to start slowly and build up to 30 minutes of brisk walking per day. Patients may also enjoy working up to two miles or the 10,000 steps per day goal.

Idaho Adults Who Consume Five Fruit or Vegetable Servings Daily by Diabetes and Weight Class, 2002 BRFSS



Weight Loss and Other Risk Factors

“The epidemic of obesity spells a twin epidemic of type 2 diabetes as well as cardiovascular death disease.”

- Donna H. Ryan, M.D., American Association of Diabetes Educators 2003 Annual Meeting

Smoking - Not a Weight Loss Strategy

Adults with diabetes who smoke are less likely to be overweight, posing an educational challenge for health care providers. According to 2002 data, 14% of smokers are overweight; 24% of non-smokers with diabetes are overweight. Physicians and health care providers have a particular responsibility to remind patients of the dangers of smoking and to discourage smoking as a weight loss strategy.

Blood Pressure

The prevalence of high blood pressure (greater than or equal to 140/90) is higher for all Idaho adults with diabetes, but particularly for those who are overweight. Nearly half of adults with diabetes, who are not overweight, reported high blood pressure in 2001. (This question was not asked in 2002, so 2001 data is the most current available data.) The percentage went up to 68% for those with diabetes who are overweight. Weight loss also reduces this significant cardiovascular risk factor.

Cholesterol

Adults with diabetes also generally have higher cholesterol levels than the rest of the population. However, the 2001 BRFSS survey (the most current data) revealed unexpected results, at odds with national statistics related to diabetes. The prevalence of high cholesterol (blood cholesterol level greater than or equal to 240 mg/dL) was higher in adults with diabetes (61%) who are not overweight than in overweight adults with diabetes (52%).

Normal Weight Idahoans Are Healthier

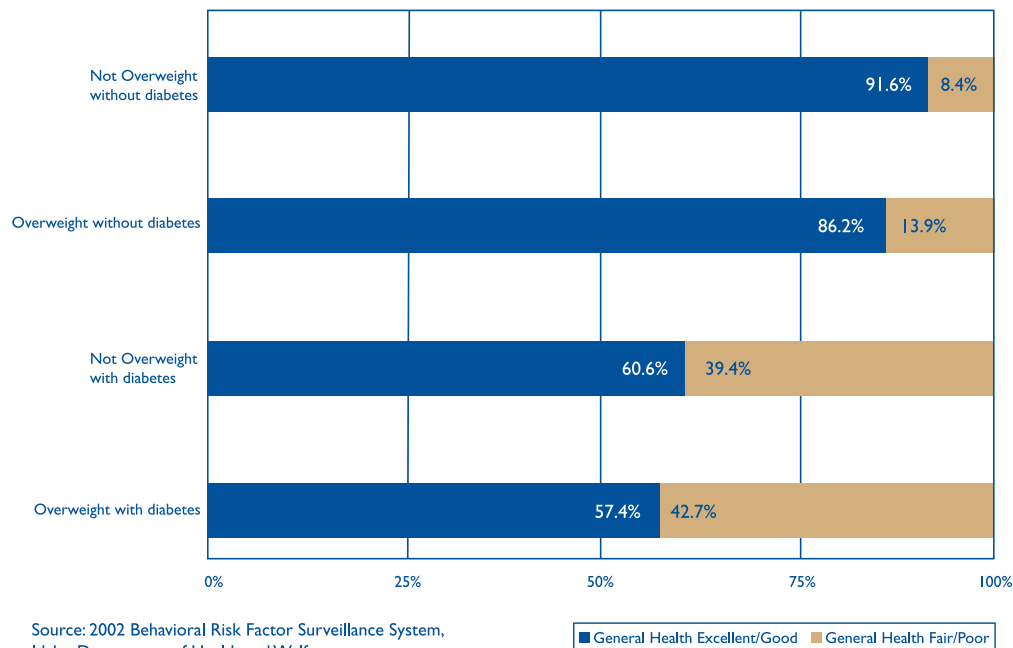
Idaho 2002 BRFSS respondents, with and without diabetes who are not overweight, reported better overall health than overweight respondents. And people without diabetes reported better health than those with diabetes. This self-reporting of Idahoans matches the national research on the negative impacts that overweight, obesity and diabetes have on the health of Americans.

Tommy Thompson, U.S. Secretary of Health and Human Services, recently identified overweight and obesity as the number one health challenge facing the nation. Physicians and other health care providers can respond to this challenge by actively counseling and supporting their patients in their efforts to improve their health through diet, exercise and weight loss. The Idaho DPCP has resources for health professionals and patients that help to improve care and diabetes self-management.

“Individuals have the power to protect their health, and prevention is the key. Through adoption of healthy behaviors, we can reduce the risk of illness and disease.”

- Tommy Thompson, HHS Secretary, announcing the 2003 Healthy Communities Initiative

General Health Status of Idaho Adults with Diabetes
by Weight Category, 2002 BRFSS



The Idaho Diabetes Prevention and Control Program and Other Resources

Idaho Diabetes Prevention and Control Program (IDPCP)

208-334-4928

www.idahohealth.org

hartmanm@idhw.state.id.us

The Idaho Diabetes Prevention and Control Program works to measure the impact of diabetes, increase public awareness about preventing the complications of diabetes, and develop partnerships that improve diabetes care.

National Diabetes Education Program

1-800-438-5383

www.ndep.nih.gov

The Small Steps, Big Rewards GAME PLAN toolkit for health care providers includes guidelines for determining a patient's readiness to begin a weight loss program and steps to take in counseling a patient through that program as well as free, downloadable materials such as daily food and activity diaries and a fat/calorie counter booklet.

American Diabetes Association

1-800-342-2383

www.diabetes.org

The Weight Loss Matters 5-part brochure series provides information on the connection between weight and diabetes, Body Mass Index, weight loss tips, and portion control and exercise options. The ADA is also developing a monthly series of tip sheets and other materials to assist medical professionals with tips on talking to patients about weight loss plans.

This publication was supported by Grant No. U32/CCU022691-01 from the Centers for Disease Control and Prevention (CDC). Its contents are solely the responsibility of the authors and do not necessarily represent the official views of Centers for Disease Control and Prevention. Costs are available from the Idaho Department of Health and Welfare, IDHW / # of copies printed-12032-month/year printed. Cost per unit \$0.____.



Idaho Diabetes Prevention and Control Program

Bureau of Community and Environmental Health

**450 West State Street
Boise, ID 83702**